

Chapter 10

Moroccan Arabic

Jeffrey Heath

University of Michigan

Morocco, even if the disputed Western Sahara is excluded, is rivaled only by Yemen in its variety of Arabic dialects. Latin/Romance sub- and ad-strata have played crucial roles in this, especially 1. when Arabized Berbers first encountered Romans; 2. during the Muslim and Jewish expulsions from Iberia beginning in 1492; and 3. during the colonial and post-colonial periods.

1 History and current state

1.1 History

Moroccan Arabic (MA) initially took shape when Arab-led troops, probably Arabized Berbers from the central Maghreb who spoke a contact variety of Arabic, settled precariously in a triangle of Roman cities/towns consisting of Tangier, Salé, and Volubilis, starting around 698 AD. Mid-seventh-century tombstones from Volubilis, inscribed in Latin, confirm that Roman Christians were present, though in small numbers, when the Arabs arrived. Shortly thereafter, in 710–711, an Arab-led army from Morocco began the conquest of southern Spain, a richer and more secure prize that drew away most of the Arab elite. In Morocco, turnover of the few Arabs and of their Arabized Berber troops was high; they were massacred or put to flight in the Kharijite revolt of 740. The eighth and ninth centuries had perfect conditions for the development of a home-grown Arabic in the Roman triangle in Morocco, and in the emerging Andalus, with a strong Latinate substratum.

The first true Arab city, Fes, was not founded until approximately 798, a century after the first occupation of Morocco, and its population did not bulk up until immigration from Andalus and the central Maghreb began around 817. With a cosmopolitan population, and located outside of the old Roman triangle, its



Andalusi and non-Andalusi quarters may have maintained their respective dialects for a long time. The remainder of Morocco was occupied by Berber tribes until much later.

During the eleventh century, the Arabian Bedouin often called Banu Hilāl entered the central Maghreb in large numbers (cf. Benkato, this volume). They partially bedouinized the Arabic dialects in Tunisia and Algeria, producing hybrid varieties that combined pre- and post-Hilalian features. They also gradually pushed their way south and west across the Sahara, bringing their distinctively Bedouin Arabic, known as Ḥassāniyya, into the southern Maghreb, including some oases of southern Morocco proper and the entire Western Sahara. Meanwhile, hybridized Algerian dialects, also reflecting a Berber substratum, were spreading into western Morocco, taking root in new farming villages in the central plains around Fes, and in the younger cities such as Meknes and Marrakesh (Heath 2002).

In 1492, the Catholic Kings abruptly expelled Spanish Jews from Spain, followed by expulsions through 1614 of Muslims from Spain and Portugal (see also Vicente, this volume). Jewish deportees, whose predominant home language was Judeo-Spanish, flooded into the Jewish quarters (*mellahs*) of Moroccan cities, constituting a new Jewish elite. Muslim deportees, variably speaking Arabic or Romance, arrived in several waves and were more easily assimilated. The Jewish presence in Morocco was strong until 1951, when most Jews left for Israel and other destinations.

Moroccan ports participated in growing Mediterranean and Atlantic maritime activity, associated linguistically with Lingua Franca (cf. Nolan, this volume) and various Romance languages along with Turkish, in the seventeenth and eighteenth centuries. European precolonial penetration into coastal Morocco in the late nineteenth century later expanded during the French and much smaller Spanish protectorates which lasted from 1912 to 1956. Exposure to French increased dramatically in this period.

Also of linguistic relevance is the fact that the Moroccan–Algerian border has been virtually closed for decades, due mainly to political disputes. This has partially sealed off Morocco from the central Maghreb and allowed a specifically Moroccan koiné to flourish.

1.2 Current situation

Of the 33 million Moroccans recorded in a 2014 census, nearly all are fluent L1 or (among the Berber-speaking minority) L2 speakers of some form of MA. Moreover, except in the thinly populated Western Sahara, the once-robust dialectal

variation within MA has now been greatly compressed. The MA that one is likely to hear in cafés in Rabat, Fes, Meknes, Marrakesh, Oujda, and even Tangier is the Moroccan koiné, a hybridized variety mixing pre- and post-Hilalian features and showing heavy Berber influence in prosody and vocalism.

Many Berber dialects, commonly (but inaccurately) classified into three languages (Tarifiyt, Tamazight, and Tashelhiyt), are still widely spoken in the mountain ranges and in the Souss valley along the Atlantic coast near Agadir. However, these Berber languages are full of Arabic loans, and they are slowly losing ground to Arabic in all of the cities and large towns.

2 Contact languages

2.1 General

This chapter focuses on contact between MA and European languages. Punic (Phoenecian) had probably died out locally before the Arab conquest, and Greek was a non-factor in spite of nominal Byzantine suzerainty after the fall of the Roman empire. Berber–Arabic contact is covered elsewhere (see Souag, this volume and Benkato, this volume). Diglossic borrowing from literary Arabic would take us far afield; on this, see Sayahi (2014) and Heath (1989).

The hallmark of abrupt language shift is powerful substratal influence in phonology and prosody. Some calquing of grammatical constructions may occur, but this can be difficult to tease apart from morphosyntactic simplification. There may be little or no carryover of core vocabulary and of concrete grammatical morphemes. The profile of language shift contrasts with that of adstratal borrowing during prolonged bilingualism, whose manifestations are mainly lexical, and whose complexities involve the morphological and semantic nativization of foreign-source inflected forms (cf. Manfredi, this volume).

2.2 Late Latin

The best-kept secret about MA is that, unlike the case elsewhere in the Maghreb, its oldest forms originated by language shift (probably rapid) from Late Latin (LL) to a contact Arabic spoken by Berber troops.

There are no written records of colloquial LL of the relevant period, either in North Africa or in Europe, but we can surmise that the LL spoken in the Roman triangle was intermediate between Classical Latin and early Medieval Romance, e.g. Medieval Spanish. This implies either five or possibly seven vowel qualities, phonemic stress, no vowel length, and probably some affricates č [tʃ] and ġ [dʒ].

2.3 Medieval Judeo-Spanish

The major injection of Medieval Spanish into the Moroccan heartland was the arrival of expelled Spanish Jews in 1492. They joined existing Jewish communities in the large cities, but a cultural divide between the newcomers (*megorashim*) and incumbents (*toshavim*) quickly emerged. We know from rabbinical responsa that Judeo-Spanish was still spoken in the central cities for two centuries after 1492 (Chetrit 1985). In far northern Morocco, a form of Arabic- and Hebrew-influenced Judeo-Spanish called Hakitia or Haketia remained in vernacular use until the early twentieth century (Benoliel 1977), after which it merged with Modern Spanish.

2.4 Modern French and Spanish

Spanish and to some extent Portuguese and Catalan remained contact influences chiefly in ports through the late nineteenth century, when direct Spanish involvement in northern Morocco became more significant. Iberian loanwords figure prominently in the early twentieth-century maritime vocabulary provided by Brunot (1920). During the Protectorates, French became a major language of education and administration in most of Morocco, especially in the west-to-east Casablanca–Rabat–Fes–Meknes–Taza corridor, while Spanish consolidated its position in the far north. French loanwords during the early Protectorate are in Brunot (1949). MA–French and MA–Spanish bilingualism has increased in the postcolonial period due to media and mass education. English influence is increasing, mainly through tourism, science education, and finance.

3 Contact-induced changes in MA

3.1 Phonology

MA dialects – archaic Pre-Hilalian, hybridized Post-Hilalian, and in the far south the unhybridized Ḥassāniyya – differ sharply in vocalic systems, reflecting their different histories (Heath 2018).

Classical Arabic (CA) had short {*i* *ā* *ū*} versus long {*ī* *ā* *ū*}, diphthongs {*āy* *āw*}, no syncope, and no phonemic stress.

Of the three main types of MA, Ḥassāniyya is closest to CA. It has short vowels limited to closed syllables: {*ə* *ǎ*} with *ə* < {**i* **ū*}, in some dialects (e.g. Mali) also some cases of *ǔ*. It distinguishes long {*ī* *ā* *ū*} from diphthongs {*āy* *āw*}, and has no phonemic stress, but unlike CA it does allow syncope of short vowels (cf. Taine-Cheikh 1988). Ḥassāniyya shows limited effects of language contact in the phonology of Berber loanwords (cf. Taine-Cheikh 1997).

By contrast, the koiné and some other hybrids reduce all three short vowels to just one short vowel *ə* with various allophones, contrasting with full vowels {*i a u*}. The hybrid dialects monophthongize {**äy* **äw*} to merge with {*i u*}. The rounding of original short **ü* often survives next to a velar/uvular consonant, even after syncope (which is productive), suggesting an ongoing feature transfer that, if and when fully implemented, would result in underlying labiovelars {*k^w g^w q^w ħ^w ʕ^w*} next to *ə* (which becomes phonetic [ʊ]) or before a consonant. Again there is no phonemic stress. This is a Berber-like system, reflecting deep long-term substratal/adstratal contact.

A more archaic Berber-like system, still preserving at least the opposition of short **ī* ~ **ā* versus **ü* and likely at least some diphthongs, was brought to Morocco by the early Arabized Berber troops. There it was overlaid on an LL substratum that had five to seven vowel qualities, phonemic stress, no syncope, and no vowel length. The resulting Pre-Hilalian MA has: three regular vowels {*i a u*}, a subset of which (the original short vowels) syncopate in weak metrical positions; phonemic stress; and a schwa vowel *ə* confined to posttonic final closed syllables. The leveling of vowel length distinctions, and the re-splitting of the previously merged **ī* ~ **ā* into *i* and *a* based on consonantal environment, were disruptive to the morphology (see §3.2). Both the leveling, and the new phonemic stress, were shared with speakers of early Andalusí Arabic, which had a similar LL substratum and whose first invaders came from Morocco. This points to an original dialect area in the eighth and ninth centuries, including coastal Andalus and at least the Tangier–Salé axis in Morocco (after Volubilis was abandoned in favor of Fes), differing significantly from even Pre-Hilalian central Maghrebi dialects, which likely never had major LL substratal effects.

The differences among MA dialect types can be illustrated by forms of ‘big’ (Table 1). The suggested proto-forms are close to CA but show some adjustments to short **ī* and **ü*. Acute accent marks stress in Pre-Hilalian. Observe especially that the two homophonous Pre-Hilalian *kbír* forms behave differently when a vowel-initial suffix is added. The morphological consequences of length merger in Pre-Hilalian are considered below. Emphatic /r/ is phonemically distinct from plain /r/ in all varieties.

Later adstratal borrowings from Spanish and French, as well as from CA, predictably required adjustments to MA phonology. The most disruptive changes affected French borrowings into MA (our data are best for the hybrid koiné). The rich array of French vowel qualities had to be squeezed into three MA qualities. French {*i ü e ε*} merge as MA *i*. French {*u o ə œ*} merge as MA *u*. French *a* becomes MA *a*. This compression has had considerable morphological consequences (see §3.2 below).

Table 1: The word-family ‘big’ in MA dialect types

Gloss	Proto	Pre-Hilalian	Hybrid	Ḥassāniyya
‘big’ (SG.M)	*kǎbīr	<i>kbír</i>	<i>kbir</i>	<i>kbīr</i>
‘big’ (SG.F)	*kǎbīr-a	<i>kbír-a</i>	<i>kbir-a</i>	<i>kbīr-a</i>
‘he got big’	*kǎbīr	<i>kbír</i>	<i>kbər</i>	<i>kbər</i>
‘she got big’	*kǎbīr-at	<i>kíbr-at</i>	<i>kbr-at</i>	<i>kəbr-at</i>
‘bigger’	*ǎkbǎr	<i>kbár</i>	<i>kbər</i>	(ǎ)kbǎr
‘big (PL)’	*kǔbār	<i>kbar-ín</i>	<i>k^wbar</i>	<i>kbār</i>

The main contribution of Romance to MA consonantism is the affricate č [tʃ]. In the current koiné, this is present as a phoneme (if at all) in the loanword *lččina* ~ *ltšina* ‘orange (fruit)’ < Spanish *la China*, as brought out in the diminutive which breaks up the čč cluster, hence *lččin* ~ *ltišin* and further variants (Heath 1999). Archaic northern dialects have more examples of č, and these dialects pronounce geminated ž as affricate ġ [dʒ].

3.2 Morphology

Direct borrowing of bound function morphemes is rare in MA as in other languages. A notorious exception is *ta-...-t* in abstract nouns of profession, from the Berber feminine singular, likely extrapolated from specific Berber borrowings like *ta-šaffar-t* ‘thief’.

Another glaring exception is the set of D-possessives: *d* (archaic *di*) before nouns, *dyal-* (Pre-Hilalian *dyál-*) primarily before pronominal suffixes (e.g. *dyal-i* ‘mine’, *dyal-u* ‘his’). The obvious etymology (Latin *dē* > LL **de* or unstressed **di*) presents no phonological or semantic difficulties, but it was rejected by a century of Maghrebi Arabists, who favored various far-fetched Arabic-internal etymologies. However, an LL source is also indicated by its dialectal distribution: Pre-Hilalian MA, regional colloquial Andalusī Arabic, and certain coastal enclaves in Algeria that were likely settled by Andalusī merchants. The mysterious pre-pronominal variant *dyál-* was generalized from LL **di* él(l)u ‘its; his’ and LL **di* él(l)a ‘hers’, which are near-exact matches to the still extant Pre-Hilalian *dyál-u* ‘his’ and *dyál-a* ‘hers’. The motivation for this admittedly unusual morphemic borrowing was the need for a new possessive morpheme as Arabic dialects gradually abandoned the compound-like CA “construct” possessive (Heath 2015). The fact that possessive morphemes are not immune from borrowing is also shown

by possessed forms of certain kin terms, with a Berber nasal suffix, before nominal possessors in hybrid dialects, as in (koiné) *bḥa-yn ḥamid* ‘Hamid’s father’, cf. *bḥa* ‘father’.

Verbs as well as nouns are readily borrowed from Romance languages into MA. This raises the question of which Romance inflected form is borrowed, and what value it is assigned to within the MA aspectual system, which groups 1st/2nd persons versus 3rd person subject splits in the perfect of some verb types. Most Spanish verb borrowings look like Spanish infinitives, e.g. *frinar* ‘to brake’ (< *frenar*), but more likely reflect a cluster of forms based on this stem shape in Spanish itself. In addition to the infinitive, this set also includes future *frenar-é*, conditional *frenar-ía*, and forms with *d* instead of *r*, namely participle *frenado* and imperative plural *frenad*. Consonant-final borrowed verbs like *frinar* behave like native MA quadriliteral verbs, and have identical perfect and imperfect forms.

By contrast, French verbs are regularly borrowed as weak (i.e. vowel-final) verbs, with imperfect and 1st/2nd perfect *i*, versus 3rd-person perfect *a*. An example is ‘declare’: imperfect *-diklari* matching perfect 1st/2nd *diklari-*, versus 3rd *diklara(-)*. The likely crosslinguistic bridge is the conspicuous cluster of French forms ending in orthographic *-er* (infinitive), *-ez* (2PL subject), *-ais/-ait/-aient* (imperfect), and *-é(e)(s)* (participle). All of these are phonetic [e] or [ɛ] and therefore merge as MA *i*, interpretable in MA as the imperfect and 1st/2nd perfect of weak verbs. The marked 3rd-person perfect with final *a* is then easily formed by analogy (cf. Lucas & Čéplö, this volume: §4.2 for a parallel development in Maltese).

The merger of vowel length in Pre-Hilalian MA set off a chain reaction of morphophonological restructurings, most notably in the verbal system. The CA three-way vocalic opposition of hollow verbs, e.g. for ‘to be’ imperfect *kūn-*, pre-consonantal perfect *kūn-*, and prevocalic (or word-final) perfect *kān-*, is largely preserved in hybrid and Post-Hilalian dialects. By contrast, in Pre-Hilalian MA, after the momentous vowel-length merger, the hollow paradigm was reorganized into a binary opposition of *kún* (imperfect and 1st/2nd perfect) versus *kán* (3rd perfect). This paradigmatic reorganization, which makes no sense semantically and is apparently unique to Pre-Hilalian MA, then spread analogically to other verb types, including strong trilaterals that have three consonants and no long vowels, e.g. ‘enter’: imperfect *-thul* matching 1st/2nd perfect *thul-*, but 3rd perfect *thal*.

3.3 Syntax

Before reaching Morocco, spoken Arabic had prepositions, possessum–possessor, and DEF–N–ADJ order within NPs, preverbal negation (cf. Lucas, this volume)

and complementizers, a perfect/imperfect split in verbs, and pronominal-subject agreement on verbs (expressed, in part, by suffixes). Romance languages like Spanish, and presumably eighth-century LL, were already close to this profile, so opportunities for syntactic influence were limited. Some minor French complementizers are common in educated MA, as in *au lieu d'igulu...* 'instead of them saying', from French *au lieu de* 'instead of' plus MA *igulu* 'they say'.

3.4 Lexicon

While the LL substratum had a profound effect on early MA phonology and morphophonemics, and also left behind a morphemic souvenir in the form of D-possessives, not a single basic LL lexical item can be shown to have been preserved in any archaic MA dialect. The most promising candidate for such a retention is dialectal MA *qḅtal* and variants 'elbow'. The likely etymon is LL *cubitellu (later LL *kubtellu), diminutive of Latin *cubitu(s)* 'elbow', cf. Modern Spanish *codillo*. The other possibility, less straightforward semantically, is a reflex of the related adjective, Latin *cubitāle*, cf. Modern Spanish *codal*. In Morocco, *qḅtal* 'elbow' survives in several Judeo-Arabic dialects. For Muslims, it was recorded in an unspecified location in the unpublished fichier of colonial-period linguist Georges Colin (Iraqi Sinaceur 1993: 1525; de Prémare 1998: 224), and by me in the 1980s in archaic varieties of the Fes–Sefrou area. *qḅtal* is completely unknown to the great majority of Moroccan Muslims. Preservation of *b* shows that *qḅtal* is not a recent borrowing from any form based on Modern Spanish *codo*. The *b* was still present in (very) Old Spanish *cobdo*, its diminutive *cobdillo*, and *cobdal*. "Cubtill" 'elbow' is recorded for late Andalusī Arabic (Corriente 1997: 412; Dozy 1967: 302). The geographic and communal distribution of *qḅtal*, especially among Muslims, suggests that it was introduced into Morocco by late Medieval Jewish refugees.

There are, however, hundreds of well-established Spanish loanwords, especially in northern Morocco. There, Spanish is ubiquitous in schools and broadcast media, Spanish tourists are common, and many Moroccans serve as day-laborers in Spanish enclaves Ceuta and Melilla. While Spanish got a precolonial head-start, French has long since overtaken it in the rest of Morocco. Of special interest are cases where an original Spanish borrowing was later gallicized, sometimes only in part. Examples are MA *antiris* '(monetary) interest', a hybrid of Spanish *interés* and French *intérêt*, and MA *gṛabaṭa* 'necktie' from Spanish *corbata* and French *cravate*. Nonsynonymous mergers also occur, as with *garṣun*, attested both as 'waiter' (French *garçon*) and 'underpants' (Spanish *calzón*). 'To sign' is now usually *-siṇi/siṇa* or *-sini/sina* (< French *signer*), but an obsolescent

Judeo-Arabic variant *sinar* with (pseudo-)Spanish infinitival ending is attested. Since the Spanish synonym is the unrelated *firmar*, MA *sinar* must have been formed by applying a borrowing routine “add *-ar* to the stem” to French stems, probably early in the colonial period when still-abundant Spanish borrowings were being replaced or hybridized under the influence of the newly dominant French.

The process is now coming full circle, as English influence expands. The weak verb alternation of final *a/i* is productive for verbs borrowed from French, as noted above (cf. again the close parallels in Maltese; Lucas & Čéplö, this volume: §4.2). A borrowing routine “add final *a/i* to the stem” extrapolated from French/MA pairs, is now extended to English, where it has no basis in English inflectional paradigms. Examples are the comical *ka-y-spiki mzyan* ‘he speaks (English) well’, and junkie slang like *tt-ṣṭuna* ‘he got stoned’ (participle *m-ṣṭuni* ‘stoned’).

And then there are the many playful translinguistic inventions, concocted among groups of men sitting in cafés, sipping mint tea or smoking... whatever. Nearly all such inventions are ephemeral, but a few have caught on (Heath 1987). Consider the fairly common koiné noun *ḥwadri* ‘pal, buddy’. Unbeknownst to those who now use it, it must have arisen via two successive transformations. First, Spanish *padre* and *madre* were playfully combined with the CCaCCi template for denominal occupational derivatives, as though derived from MA *ḥba ~ bu* ‘father’ and MA *ḥm^(w)* ‘mother’. Templatic CCa... is realized as Cwa... when based on a CV... input, as in *ṣwabni* ‘seller of soap’ (< *ṣabun*). Combining CCaCCi with *padre* and *madre* produces the slang terms (attested but rare) *ḥwadri* and *ḥwadri*. The final and most ingenious step was to combine the sub-template Cwadr-i, emergent from these ‘father/mother’ forms, to *ḥa- ~ ḥu-* ‘brother’, outputting *ḥwadri*, which then acquires the same ‘buddy’ sense as American English *bro*.

4 Conclusion and prospects

The broad outlines of historical language contact in Morocco are becoming reasonably clear. The most urgent need is for more material and analysis of Moroccan Judeo-Arabic (MJA), in forms accessible to international audiences. Ideally we would want to tease apart the original LL influence on Pre-Hilalian MJA, as preserved by the *toshavim*, from the medieval Judeo-Spanish brought to Morocco in 1492 by the *megorashim*.

Significant Moroccan Arab and Berber expat communities exist in France, the Netherlands, Belgium, Germany, Switzerland, and Spain. These *vacanciers* return

to Morocco in large numbers during summer vacations and on Muslim holy days. There are opportunities to study them both in Europe (Nortier 1990) and in their interactions with other Moroccans.

Another promising topic for investigation is a semi-pidginized form of MA used by monolingual maids in large cities as a kind of foreigner talk to their expat French employers.

Further reading

- Heath (1989) is a study of lexical and phrasal borrowing/code-switching from European languages and from Standard Arabic in Moroccan Arabic.
- Nortier (1990) examines language contact phenomena among Moroccans in the Netherlands.
- Sayahi (2014) is a regional study of Arabic sociolinguistics and language contact from Spain through Morocco to Tunisia.

Acknowledgements

Fieldwork in Morocco was supported by grants from the National Science Foundation (especially BNS 79-04779 in 1979–1981) and by a Fulbright research fellowship in 1986. For support while working on MA material in the 1980s, thanks also to the National Endowment for the Humanities, the Deutscher Akademischer Austauschdienst, the Alexander von Humboldt Stiftung, and the Hebrew University of Jerusalem.

Abbreviations

CA	Classical Arabic	MA	Moroccan Arabic
F	feminine	M	masculine
L2	second language	PL	plural
LL	Late Latin	SG	singular

References

- Benoliel, José. 1977. *Dialecto judeo-hispano-marroquí o hakitia*. Madrid: Varona.
- Brunot, Louis. 1920. *Notes lexicologiques sur le vocabulaire maritime de Rabat & Salé*. Paris: Ernest Leroux.

- Brunot, Louis. 1949. Emprunts dialectaux arabes à la langue française depuis 1912. *Hespéris* 36. 347–430.
- Chetrit, Joseph. 1985. Judeo-Arabic and Judeo-Spanish in Morocco and their sociolinguistic interaction. In Joshua Fishman (ed.), *Readings in the sociology of Jewish languages*, 261–279. Leiden: Brill.
- Corriente, Federico. 1997. *A dictionary of Andalusí Arabic*. Leiden: Brill.
- Dozy, Reinhart. 1967. *Supplément aux dictionnaires arabes*. 3rd edn. Vol. 2. Leiden/Paris: Brill & Maisonneuve et Larose.
- Heath, Jeffrey. 1987. *Hasta la mujerra!* and other instances of playful language mixing in Morocco. *Mediterranean Language Review* 2. 113–116.
- Heath, Jeffrey. 1989. *From code-switching to borrowing: A case study of Moroccan Arabic*. London: Kegan Paul.
- Heath, Jeffrey. 1999. Sino-Moroccan citrus: Borrowing as a natural scientific experiment. In Lutz Edzard & Mohammed Nekroumi (eds.), *Tradition and innovation: Norm and deviation in Arabic and Semitic linguistics*, 168–176. Wiesbaden: Harrassowitz.
- Heath, Jeffrey. 2002. *Jewish and Muslim dialects of Moroccan Arabic*. London: Routledge.
- Heath, Jeffrey. 2015. D-possessives and the origins of Moroccan Arabic. *Diachronica* 32(1). 1–33.
- Heath, Jeffrey. 2018. Vowel-length merger and its consequences in archaic Moroccan Arabic. *Zeitschrift für Arabische Linguistik* 6. 12–43.
- Iraqi Sinaceur, Zakia. 1993. *Le dictionnaire Colin d'arabe dialectal marocain*. Vol. 6. Rabat: Institut d'Etudes et de Recherches pour l'Arabisation.
- Nortier, Jacomine. 1990. *Dutch–Moroccan Arabic code switching*. Dordrecht: Foris.
- de Prémare, André-Louis. 1998. *Dictionnaire arabe-français*. Vol. 10. Paris: l'Harmattan.
- Sayahi, Lotfi. 2014. *Diglossia and language contact: Language variation and change in North Africa*. Cambridge: Cambridge University Press.
- Taine-Cheikh, Catherine. 1988. Métathèse, syncope, épenthèse: A propos de la structure prosodique du hassaniyya. *Bulletin de la Société de Linguistique de Paris* 83(1). 213–252.
- Taine-Cheikh, Catherine. 1997. Les emprunts au berbère zénaga: Un sous-système vocalique du ḥassāniyya. *Matériaux Arabes et Sudarabiques (GELLAS)* 8. 93–142.

